

Application No.: 10/518,783

Docket No.: SONYJP 3.3-309

IN THE CLAIMS

1. (currently amended) A transmission apparatus, comprising:

first production means for producing a first content of a video signal and/or an audio signal;

second production means for producing a second content corresponding to the first content, the second content including a script for outputting a graphical user interface, and the script includes a description for causing a reception apparatus to execute:

a process for producing use history information including a predetermined content in accordance with a use result related to the use by a user of the first content in the reception apparatus, and

a process for changing the graphical user interface based on the use history information so as to change a service to be provided with an operation to a user interface screen picture; and

sending means for providing, as a broadcast, a transmission output of the second content in combination with the first content,

the style of the graphical user interface being adaptively varied by the reception apparatus according to the first content and a viewing history of the first content, the viewing history of the first content being stored in the reception apparatus,

the reception apparatus changes the graphical user interface relating to the first content in accordance with the second content and the viewing history, which is stored in the reception apparatus such that the changing of the graphical user interface is conducted entirely at the reception apparatus.

2. (previously presented) The transmission apparatus according to Claim 1, wherein the first content is compressed and coded, and transmitted.

3. (previously presented) The transmission apparatus according to Claim 1, wherein the second content is transmitted as data broadcast.

4. (currently amended) A reception apparatus, comprising:
reception means for receiving a first content including a video signal and/or an audio signal transmitted as a broadcast and a second content corresponding to the first content, the second content including a script for outputting a graphical user interface, and the script including a description for causing the reception apparatus to execute:

a process for producing use history information including a predetermined content in accordance with a use result related to the use by a user of the first content in the reception apparatus, and

a process for changing the graphical user interface based on the use history information so as to change a service to be provided with an operation to a user interface screen picture; and

user interface forming means for forming a graphical user interface to be output together with a picture as the first content in accordance with the script, for producing and storing the use history information in accordance with the use result, and for executing, in accordance with the script,

the style of the graphical user interface being adaptively varied by the reception apparatus according to the first content and a viewing history of the first content, the viewing history of the first content being stored in the reception apparatus,

the reception apparatus changes the graphical user interface relating to the first content in accordance with the second content and the viewing history, which is stored in the reception apparatus such that the changing of the graphical user interface is conducted entirely at the reception apparatus.

5. (previously presented) The reception apparatus according to Claim 4, wherein the first content is compressed and coded, and transmitted.

6. (previously presented) The reception apparatus according to Claim 4, wherein the second content is transmitted as data broadcast.

7. (previously presented) The reception apparatus according to Claim 4, wherein the user is allowed to perform operations to the user interface picture.

8. (previously presented) The reception apparatus according to Claim 4, wherein

a mark operation is performed on a selected one of the first content; and

the graphical user interface changes in response to the mark operation.

9. (canceled)

10. (currently amended) A transmission apparatus, comprising:

first production means for producing a first content of a video signal and/or the audio signal;

second production means for producing a second content corresponding to the first content, the second content including

a script for outputting a graphical user interface, and the script including a description for causing a reception apparatus to execute a process for changing a picture content in the graphical user interface in accordance with a change in the content of the first content; and

sending means for providing, as a broadcast, a transmission output of the second content combined with the first content,

the style of the graphical user interface being adaptively varied by the reception apparatus according to the first content and a viewing history of the first content, the viewing history of the first content being stored in the reception apparatus,

the reception apparatus changes the graphical user interface relating to the first content in accordance with the second content and the viewing history, which is stored in the reception apparatus such that the changing of the graphical user interface is conducted entirely at the reception apparatus.

11. (currently amended) A reception apparatus, comprising:

reception means for receiving a first content including a video signal and/or an audio signal transmitted as a broadcast and a second content corresponding to the first content, the second content including a script for outputting a graphical user interface, and the script including a description for causing the reception apparatus to execute a process for changing a picture content in the graphical user interface in accordance with a change in the content of the first content; and

interface forming means for forming the graphical user interface so as to change the picture content in accordance with the change in the first content in accordance with the script, and for forming the user interface picture to be output together with a picture as the first content in accordance with the script,

the style of the graphical user interface being adaptively varied by the reception apparatus according to the first content and a viewing history of the first content, the viewing history of the first content being stored in the reception apparatus,

the reception apparatus changes the graphical user interface relating to the first content in accordance with the second content and the viewing history, which is stored in the reception apparatus such that the changing of the graphical user interface is conducted entirely at the reception apparatus.

12. (currently amended) A transmission apparatus, comprising:

first production means for producing a first content of a video signal and/or an audio signal;

second production means for producing a second content corresponding to the first content, the second content including a script for outputting a graphical user interface and the script including a description for causing a reception apparatus to execute:

a process for producing use history information including a predetermined content in accordance with a use result by a user of the first content in the reception apparatus; and

a process for changing a picture content in the graphical user interface based on the use history information; and

sending means for providing, as a broadcast, a transmission output of the second content combined with the first content,

the style of the graphical user interface being adaptively varied by the reception apparatus according to the first content and a viewing history of the first content, the viewing history of the first content being stored in the reception apparatus,

the reception apparatus changes the graphical user interface relating to the first content in accordance with the second content and the viewing history, which is stored in the

reception apparatus such that the changing of the graphical user interface is conducted entirely at the reception apparatus.

13. (currently amended) A reception apparatus comprising:

reception means for receiving a second content for outputting a graphical user interface, the second content including a script having a description for causing the reception apparatus to execute:

a process for producing a first content of a video signal and/or an audio signal transmitted as a broadcast and use history information of a predetermined content in accordance with the use result related to the use by a user of the first content in the reception apparatus and

a process for changing a picture content on the graphical user interface based on the use history information; and
interface forming means for

forming a graphical user interface to be output with a picture as a first content in accordance with the script,

for producing and storing use history information according to the use result, and

for forming the graphical user interface to change the picture content based on the stored use history information,

the style of the graphical user interface being adaptively varied by the reception apparatus according to the first content and a viewing history of the first content, the viewing history of the first content being stored in the reception apparatus,

the reception apparatus changes the graphical user interface relating to the first content in accordance with the second content and the viewing history, which is stored in the reception apparatus such that the changing of the graphical user interface is conducted entirely at the reception apparatus.

14. (currently amended) A transmission apparatus, comprising:

first content producer operable to produce a first content of a video signal and/or an audio signal;

second content producer operable to produce a second content corresponding to the first content, the second content including a script for outputting a graphical user interface, and the script includes a description for causing a reception apparatus to execute:

a process for producing use history information including a predetermined content in accordance with a use result related to the use by a user of the first content in the reception apparatus, and

a process for changing the graphical user interface based on the use history information so as to change a service to be provided with an operation to a user interface screen picture; and

transmitter operable to provide, as a broadcast, a transmission output of the second content in combination with the first content,

the style of the graphical user interface being adaptively varied by the reception apparatus according to the first content and a viewing history of the first content, the viewing history of the first content being stored in the reception apparatus,

the reception apparatus changes the graphical user interface relating to the first content in accordance with the second content and the viewing history, which is stored in the reception apparatus such that the changing of the graphical user interface is conducted entirely at the reception apparatus.

15. (currently amended) A reception apparatus, comprising:
receiver operable to receive a first content including a video signal and/or an audio signal transmitted as a broadcast

and a second content corresponding to the first content, the second content including a script for outputting a graphical user interface, and the script including a description for causing the reception apparatus to execute:

a process for producing use history information including a predetermined content in accordance with a use result related to the use by a user of the first content in the reception apparatus, and

a process for changing the graphical user interface based on the use history information so as to change a service to be provided with an operation to a user interface screen picture; and

user interface forming device operable to form a graphical user interface to be output together with a picture as the first content in accordance with the script, to produce and store the use history information, and to execute, in accordance with the script, a process for changing the graphical user interface based on the use history information so as to change the service to be provided with the operation to the user interface screen picture,

the style of the graphical user interface being adaptively varied by the reception apparatus according to the first content and a viewing history of the first content, the viewing history of the first content being stored in the reception apparatus,

the reception apparatus changes the graphical user interface relating to the first content in accordance with the second content and the viewing history, which is stored in the reception apparatus such that the changing of the graphical user interface is conducted entirely at the reception apparatus.

16. (currently amended) A transmission apparatus, comprising:

first content producer operable to produce a first content of a video signal and/or the audio signal;

second content producer operable to produce a second content corresponding to the first content, the second content including a script for outputting a graphical user interface, and the script including a description for causing a reception apparatus to execute a process for changing a picture content in the graphical user interface in accordance with a change in the content of the first content; and

transmitter operable to provide, as a broadcast, a transmission output of the second content combined with the first content,

the style of the graphical user interface being adaptively varied by the reception apparatus according to the first content and a viewing history of the first content, the viewing history of the first content being stored in the reception apparatus,

the reception apparatus changes the graphical user interface relating to the first content in accordance with the second content and the viewing history, which is stored in the reception apparatus such that the changing of the graphical user interface is conducted entirely at the reception apparatus.

17. (currently amended) A reception apparatus, comprising:
receiver operable to receive a first content including a video signal and/or an audio signal transmitted as a broadcast and a second content corresponding to the first content, the second content including a script for outputting a graphical user interface, and the script including a description for causing the reception apparatus to execute a process for changing a picture content in the graphical user interface in accordance with a change in the content of the first content; and

interface forming device operable to form the graphical user interface so as to change the picture content in accordance with the change in the first content in accordance with the script, and to form the user interface picture to be output together with a picture as the first content in accordance with the script,

the style of the graphical user interface being adaptively varied by the reception apparatus according to the first content and a viewing history of the first content, the viewing history of the first content being stored in the reception apparatus,

the reception apparatus changes the graphical user interface relating to the first content in accordance with the second content and the viewing history, which is stored in the reception apparatus such that the changing of the graphical user interface is conducted entirely at the reception apparatus.

18. (currently amended) A transmission apparatus, comprising:

first content producer operable to produce a first content of a video signal and/or an audio signal;

second content producer operable to produce a second content corresponding to the first content, the second content including a script for outputting a graphical user interface and the script including a description for causing a reception apparatus to execute:

a process for producing use history information including a predetermined content in accordance with a use result by a user of first content in the reception apparatus; and

a process for changing a picture content in the graphical user interface based on the use history information; and

transmission device operable to provide, as a broadcast, a transmission output of the second content combined with the first content,

the style of the graphical user interface being adaptively varied by the reception apparatus according to the first content and a viewing history of the first content, the viewing history of the first content being stored in the reception apparatus,

the reception apparatus changes the graphical user interface relating to the first content in accordance with the second content and the viewing history, which is stored in the reception apparatus such that the changing of the graphical user interface is conducted entirely at the reception apparatus.

19. (currently amended) A reception apparatus comprising:

receiver operable to receive a second content for outputting a graphical user interface, the second content including a script having a description for causing the reception apparatus to execute:

a process for producing a first content of a video signal and/or an audio signal transmitted as a broadcast and use history information of a predetermined content in accordance with the use result related to the use by a user of the first content in the reception apparatus and

a process for changing a picture content on the graphical user interface based on the use history information; and
interface forming device operable to

form a graphical user interface to be output with a picture as a first content in accordance with the script,

to produce and store use history information according to the use result, and

to form the graphical user interface to change the picture content based on the stored use history information,

the style of the graphical user interface being adaptively varied by the reception apparatus according to the first content and a viewing history of the first content, the viewing history of the first content being stored in the reception apparatus,

the reception apparatus changes the graphical user interface relating to the first content in accordance with the second content and the viewing history, which is stored in the reception apparatus such that the changing of the graphical user interface is conducted entirely at the reception apparatus.